CLEAN DEVELOPMENT MECHANISM

CDM-EB94-AA-A07

Concept note

Methodology-specific simplified additionality (positive list) (jointly by the MP, SSC WG and secretariat)

Version 01.0

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1. Procedural background

1. At its ninety-second meeting, the Executive Board of the clean development mechanism (CDM) (hereinafter referred to as the Board), in the context of its consideration of the draft revised methodology "ACM0001: Flaring or use of landfill gas", requested the secretariat, the Methodologies Panel (MP) and the Small-Scale Working Group (SSC WG) to prepare a concept note on how to reflect the methodology-specific simplified additionality provisions (positive list), which have a validity period and requires reassessment, for inclusion in a new tool.

2. This work also relates to the activity "Simplification of methodologies" under objective 1(c): "Develop simplified and user-friendly standards and procedures that increase efficiency and ensure environmental integrity", as referred to in table 4 of the CDM management plan 2017 (CDM-EB92-A01).

2. Purpose

3. The purpose of this concept note is to:

   (a) Analyse how to reflect the methodology-specific simplified additionality provisions (positive list), which has a validity period and requires reassessment, for inclusion in a new tool;

   (b) Describe the pros and cons of retaining simplified additionality provisions in the methodologies versus developing a new tool.

3. Key issues and proposed solutions

3.1. Additionality approaches adopted by the Board based on the clean development mechanism modalities and procedures

3.1.1. Background to the evolution of additionality approaches for large-scale and small-scale clean development mechanism project activities

4. **Additionality provisions for large-scale project activities:** The Board at its sixteenth meeting Board adopted the methodological tool "Tool for the demonstration and assessment of additionality" (version 1), which provided guidance for demonstrating additionality for large-scale project activities. The Board at its twenty-seventh meeting, adopted the methodological tool, "Combined tool to identify the baseline scenario and demonstrate additionality" (version 1) which provided step-wise approaches for both baseline scenario identification and additionality demonstration. Over time, the Board made several improvements to both tools mentioned above, which, in addition to the methodology-specific approaches, form the basis for demonstrating the additionality of large-scale projects.

5. **Additionality provisions for small-scale project activities:** Attachment A to appendix B of the simplified modalities and procedures for small-scale activities has served as the

basis for the demonstration of additionality for small-scale CDM project activities since its inception.[1]

6. The Board further developed the methodological tool "Demonstration of additionality of microscale project activities" at its fifty-fourth meeting in response to paragraph 24 of decision 2/CMP.5 and paragraph 39 of decision 3/CMP.6 as a means to promote microscale CDM project activities. Thereafter, it further simplified the additionality provisions for small-scale CDM project activities and introduced at its sixty third meeting a list of renewable electricity generation technologies that are automatically deemed as additional (positive list of technologies).

3.1.2. Key issue and its analysis

7. **Number of methodologies with simplified additionality provisions:** The appendix in this concept note lists all CDM methodologies that include methodology-specific provisions to demonstrate additionality. Among the 114 active large-scale CDM methodologies, including the consolidated ones, 20 methodologies have provided methodology-specific simplified additionality provisions and 10 of which include the corresponding validity periods. Similarly, among 95 small-scale methodologies, 9 methodologies have provided methodology-specific additionality provisions and 3 of which include corresponding validity periods).

8. Currently, seven large-scale methodologies and three small-scale methodologies with simplified additionality provisions are approved with a validity period of three years. Thus, these methodologies are supposed to be updated periodically with the positive list by the Board. However, it is important to note that updating the positive list would only affect the baseline of the future projects and the registered projects are not affected.

9. Furthermore, it should be noted that the most common approaches used in CDM methodologies to derive positive lists are: (a) regulatory additionality with or without economic analysis; (b) penetration rates; (c) performance benchmarks; and (d) costs and barriers associated with geographical regions.

10. **When is a positive list included in a tool?** A number of renewable/non-renewable energy technologies are determined as global positive list (i.e apart from the limit on installed capacity no other considerations) and have been included in the methodological tool: demonstration of additionality of small-scale project activities. This was possible due to the fact that the baseline for these technologies is predetermined to be the grid, that is in the absence of the proposed project activity, the equivalent amount of electricity would have been generated in the fossil fuel-based grid-connected plants. Thus, it makes it unnecessary for renewable energy technology projects (e.g., 15 MW grid connected solar photovoltaic project) to go through the baseline scenario identification and thereby defining automatic additionality in the form of a tool is not an issue.

11. **When is a positive list included in individual methodologies?** For a number of mitigation technologies, it was not possible to establish one standardized baseline scenario globally. The baseline scenarios are dependent on several factors like the location, size, penetration, socio-economic conditions, regulations etc. Under such scenario, a methodology specific positive list is preferred. The effect of this cause is with narrow applicability or at times other mitigation activities are coupled to make them

[1] <https://cdm.unfccc.int/Reference/COPMOP/08a01.pdf>.

positive. For example, landfill gas projects, which have different regulations in different countries varying from no regulation at all to limited regulations for partially capturing landfill gas, a positive list is included in the respective methodologies. Furthermore, a landfill gas project may also utilize the landfill gas for multiple uses (electricity, heat, co-generation), and each use may have a different baseline scenario as per the methodology. Thus, it is difficult to predetermine the baseline scenarios for such projects and activities.

12. In summary, considering the specificities of number of mitigation activity types and technologies addressed in methodologies as explained above, simplified additionality provisions currently also exist in methodologies. These include activities that involve technologies other than renewable energy, such as energy-efficient lighting technologies, energy-efficient technologies in the manufacturing industry, energy-efficient hybrid and electric vehicles, methane recovery in landfill and manure facilities, and low-carbon liquefied natural gas buses, etc.

3.2. Pros and cons of simplified additionality provisions for inclusion in the methodology versus a new tool

13. Pros and cons of the inclusion of simplified additionality provisions in the individual methodologies versus the creation of a separate tool for the same are analysed as below (see tables 1 and 2).

Table 1. Inclusion of simplified additionality provisions in the individual methodologies

No.	Pros	Cons
1	Since the use of a methodology is mandatory to develop a clean development mechanism project activity, the project participants can find all information at one place and do not need to use a separate tool to demonstrate additionality. It streamlines the project development process by avoiding several tools and methodologies for a single project activity.	Limiting an additionality approach to a specific methodology could narrow the applicability and potentially prevent another methodology of a similar type from benefitting from it.
2	The simplified additionality provisions included in a methodology need reassessment and revision at a certain interval (in most cases, every three years). The update is targeted only to those technologies relevant to the scope of the methodology, which makes it very easy for the underlying project proponents to follow its periodic revision.	Given that the validity is mentioned in the methodology, if this not tracked properly, the timeline could be missed and future project activities may be impacted adversely.
3	A user aiming to identify the correct methodology may pay enough attention to the information on simplified additionality at methodology level.	The Board cannot have oversight of all approaches developed for methodology-specific additionality.

Table 2. Development of a new tool compiling additionality approaches applicable to all methodologies

No.	Pros	Cons
1	A positive list for all technologies is compiled in one document (wider applicability of the tool).	- Increased the difficulty for the project participants to follow one additional tool in one methodology to develop the project activities. - The underlying tool will cover a long list of technologies applicable to a wide range of methodologies, which will lead to over-frequent revision of the tool as a result of reflecting each and every change/update of the positive list; - In addition, since different methodologies adopt positive lists at different timings, clubbing them in one tool would inadvertently affect other methodologies as well.
2	There is a need to update only one document after periodic evaluation of the technology.	The validity of the tool may differ for different technology groups for a different period of time. Therefore, it is difficult to revise the tool each time a technology is due to be reassessed and updated in the tool.

3.3. Conclusion

14. After analysing the pros and cons of including simplified additionality provisions in individual methodologies and the creation of a new tool compiling simplified additionality provisions in one document, the MP, the SSC WG and the secretariat would like to propose the following for the consideration of the Board:

    (a) Maintain the status quo of developing both the methodology-specific simplified additionality for certain technologies and tools where there is wider applicability of the positive list in many methodologies;

    (b) Improve the visibility of the methodologies with simplified provisions in the methodology webpage of the CDM (in the form of an index) by compiling and updating the information on the relevant methodologies, the approach used for simplified additionality and the validity period;

    (c) Develop a guidance document elaborating the criteria applied to determine the methodology-specific simplified additionality. As indicated in paragraph 10, each of these approaches have used different indicators and assumptions prior to introducing simplified additionality. For example, even among the penetration rate-based approach, there are different thresholds used for different mitigation technologies;

    (d) Remove all simplified additionality provisions from the methodologies and transfer them to a new tool. However, to avoid revisions of the tool because of different validity periods of different technologies in different methodologies, the Board may provide a mandate to reassess the simplified additionality provisions of all methodologies and approve them at one time so they have one common validity period.

15. The approaches in paragraphs 14 (a) and 14 (d) above are mutually exclusive-If the Board chooses to implement the approach in paragraph 14(d) above, until such time the approach is fully implemented, the Board should maintain the status quo of developing

both the methodology-specific simplified additionality for certain technologies and tools where there is wider applicability in order not to adversely impact project participants. The actions in paragraphs 14(b) and/or 14(c) may be implemented irrespective of the Board's choice of the approach of either paragraph 14(a) or 14(d).

4. Impacts

16. Do not foresee any cost implications for the stakeholders.

5. Subsequent work and timelines

17. If the Board decides to opt for the choice in para. 14 (a), i.e. maintaining the status quo, no further work is envisaged.

18. If the Board decides to any choices other than para. 14(a) above, further work is needed. If option 14(b) is opted a revision to the existing methodology webpage deem necessary, if option 14(c) is chosen a new guidance document needs to be prepared and if option 14(d) is chosen a new tool need be prepared, including a revision to existing methodologies where positive list is included.

6. Recommendations to the Board

19. Based on the conclusions presented in paragraph 14(a-d), the MP, SSC WG and secretariat recommend that the Board consider the choices presented and provide any further guidance.

Appendix. Methodologies with simplified additionality provisions

Methodologies:	Simplified additionality provisions
AM0001: Decomposition of fluoroform (HFC-23) waste streams	Regulatory additionality: In the absence of regulations requiring HFC-23 decomposition any quantity destructed above the regulations in the host country is deemed additional. Validity period – NIL.
AM0030: PFC emission reductions from anode effect mitigation at primary aluminium smelting facilities	Performance based additionality: The project activity is assumed to be additional if the emission performance of the project activity pot lines is better than a benchmark emission factor. A separate assessment of additionality is therefore not required. Validity period – NIL.
AM0031: Bus rapid transit projects (BRT)	Region specific additionality: BRT system implemented in least developed countries (LDC) are deemed to be automatically additional. Common practice analysis: Non-LDC can demonstrate using First-of-its-kind. Otherwise common practice based on the penetration of the project technology coupled with performance emissions benchmark of implemented technology. Validity period – NIL.
AM0070: Manufacturing of energy efficient domestic refrigerators	Performance Benchmark: If the benchmark of the specific electricity consumption of the project activity is lower than benchmark for specific electricity consumption for that class and design during each year of the crediting period, the emission reductions for this class and design, calculated as per this methodology, are deemed additional. Validity period: Updated every year.
AM0086: Distribution of zero energy water purification systems for safe drinking water	Penetration of project technology and common practice (SDWS): If the penetration of SDWS is less than 60% then automatically additional. For regions where it is more than 60% but quality of the SWDS is non-conformance up to 50% or additionality tool. Validity period – NIL.

Methodologies:	Simplified additionality provisions
AM0091: Energy efficiency technologies and fuel switching in new and existing buildings	Performance Benchmark: Total emissions level from the building units constructed in the project activity is lower than the baseline emissions level calculated by the benchmark analysis during each year of the crediting period. Validity period: Updated in each crediting period.
AM0092: Substitution of PFC gases for cleaning Chemical Vapour Deposition (CVD) reactors in the semiconductor industry	Penetration factor: The fraction of semiconductor industries which are using the project gases (C2F6 etc.) is compared to the total semiconductor plants in the relevant geographical area. 7th year onwards: (MSq value from 7th year market survey; 0.6) 14th year onward: (MSq value from 14th year market survey; 0.2) is applied. Validity period: Updated in each crediting period.
AM0101: High speed passenger rail system	Region specific additionality: HSR system implemented in least developed countries (LDC) are deemed to be automatically additional. Common practice analysis: Non-LDC can demonstrate using First-of-its-kind. Otherwise common practice based on the penetration of the project technology coupled with performance emissions benchmark of implemented technology. Validity period – NIL.
AM0105: Energy efficiency in data centers through dynamic power management	Penetration factor: If the market share of the fraction of data centers which have DPM implemented exceeds 50%, the project is no longer eligible to claim emission reductions. Validity period: Updated every three years from registration.
AM0109: Introduction of hot supply of Direct Reduced Iron in Electric Arc Furnaces	Penetration factor: If the market share of the fraction of EAF plants which have Hot DRI implemented exceeds 50%, the project is no longer eligible to claim emission reductions Validity period: Updated every five years from registration.

Methodologies:	Simplified additionality provisions
ACM0016: Mass Rapid Transit Projects	Region specific additionality: BRT system implemented in least developed countries (LDC) are deemed to be automatically additional. Common practice analysis: Non-LDC can demonstrate using First-of-its-kind. Otherwise common practice based on the penetration of the project technology coupled with performance emissions benchmark of implemented technology. Validity period – NIL.
ACM0019: N_2O abatement from nitric acid production	Regulatory additionality: In the absence of regulations requiring N_2O destruction any quantity destructed above the regulations in the host country is deemed additional. Validity period – NIL.
ACM0005: Increasing the blend in cement production	Penetration: If the penetration of blended cement is less than 5%, then additional. Validity period – NIL.
ACM0014: Treatment of wastewater	Regulatory additionality with additional conditions: For projects in an existing facility, if ere is no regulation to capture biogas and with no capacity increase and no reclamation of land from existing lagoon and if the electricity generation is less than 5 MW. Validity period – 3 years from date of approval 03 November 2019.
ACM0001: Flaring or use of landfill gas	Regulatory additionality: No regulation exists to capture LFG and if the recovered gas is used for electricity generation then the capacity should be 10 MW. Validity period – 3 years from date of approval 07 November 2016.
ACM0002: Grid-connected electricity generation from renewable sources	Penetration: RE technologies (solar PV, CSP, off shore wind, marine tidal & wave, OCTEC are additional if the penetration of tech is less than 2% of the installed capacity in grid with conditions or the total installed capacity of tech in host country is less than or equal to 50 MW. Validity period – 3 years from date of approval 27 November 2017.

Methodologies:	Simplified additionality provisions
ACM0022: Alternative waste treatment processes	Regional basis: Composting in LDC is additional. Process efficiency based on collection coverage of MSW in project region: 1. Less than 50% additional. 2. 50–80 per cent additional if there is no formal segregation. 3. No tipping fee. 4. Treatment is less than 2% at time of the GSC. For 3 & 4 additional baseline assessment required to prove dumping is baseline. Validity period – NIL.
AM0113: Distribution of compact fluorescent lamps (CFL) and light-emitting diode (LED) lamps to households	LED lamps: Household self-ballasted LED lamps projects is deemed automatically additional. Validity: 3 years from date of approval 8 November 2016. CFL lamps: For countries which have no or only limited lighting efficiency regulations according to the Efficient Lighting Policy Status Map developed by UNEP's enlighten initiative, at the time of GSC -PDD the project activity is deemed additional.
AM0116: Electric taxiing systems for airplanes	Penetration: If the e-taxing technology is penetrated less than 20% then it is considered additional. Validity: Three years from date of approval 27 November 2018.
AM0117: Introduction of a new district cooling system	Region specific additionality: DCS system implemented in least developed countries (LDC) are deemed to be automatically additional. Common practice analysis: Non-LDC can demonstrate using First-of-its-kind. Otherwise common practice based on the penetration of the project technology coupled with performance emissions benchmark of implemented technology (SEER values). Validity period – NIL.

Methodologies:	Simplified additionality provisions
AMS-III.H.: Methane recovery in wastewater treatment	The following project activities are deemed additional If it is demonstrated that: (a) The existing treatment system is an anaerobic lagoon and waste water discharged meets the host country legislation; and (b) There is no regulation in the host country, applicable to the project site that requires the management of biogas from domestic, industrial and agricultural sites. Validity period – NIL.
AMS-II.J: Demand-side activities for efficient lighting technologies	If the project lamp sold or distributed to a household by the project coordinator is self-ballasted CFLs, the countries which have no or only limited lighting efficiency regulations when the CDM-PDD or CDM-PoA-DD is published for global stakeholder consultation, according to the Efficient Lighting Policy Status Map developed by UNEP's enlighten initiative, the project activity is deemed additional. Validity period – NIL.
AMS-II.C.: Demand-side energy efficiency activities for specific technologies	If the project lamps sold or distributed by the project coordinator to households are self-ballasted LED lamps, the countries which have no or only limited lighting efficiency regulations when the CDM-PDD or CDM-PoA-DD is published for global stakeholder consultation, according to the Efficient Lighting Policy Status Map developed by UNEP's enlighten initiative,1 the project activity is deemed additional. Validity period – 3 years from date of approval 28 November 2014.
AMS-II.S.: Energy efficiency in motor systems	The project activity is deemed automatically additional (positive list) if the project involves replacement of an inefficient motor (at least IE1 standard or equivalent) up to size 375 kW (input power rating) with premium efficiency standard motors (NEMA Premium) with or without the installation of VSDs/VFDs provided that there is no legally binding standard/regulation mandating the installation of VSD/VFD. Validity period – 3 years from date of approval 28 November 2014.
AMS-III.C.: Emission reductions by electric and hybrid vehicles	If it is demonstrated ex ante that the market share of project electric/hybrid vehicles is equal to or smaller than 5 per cent of the vehicles of the same category (e.g. if project vehicles are electric scooters, market share of electric two wheelers is equal to or smaller than 5 per cent of all motorized two wheelers, irrespective of the manufacturer) in the region. Validity period – NIL.

[1] Accessible at <http://www.enlighten-initiative.org/Home.aspx>.

Methodologies:	Simplified additionality provisions
AMS-III.D.: Methane recovery in animal manure management systems	Project activities may demonstrate the additionality by showing that there is no regulation in the host country, applicable to the project site, that requires the collection and destruction of methane from livestock manure. If so, it is not required to apply the "Guidelines on the demonstration of additionality of small-scale project activities. This additionality condition also applies to Greenfield project activities. Furthermore, for project activities applying this methodology in combination with a Type I methodology, that has an energy component whose installed capacity is less than 5 MW, this procedure for additionality demonstration also applies to that component. Validity period – NIL.
AMS-III.G.: Landfill methane recovery	The following types of project activities are deemed automatically additional, if prior to the implementation of the project activity the landfill gas (LFG) was only vented and/or flared but not utilized for energy generation: (i) The LFG is used to generate electricity in one or several power plants with a total nameplate capacity that equals or is below 10 MW; (ii) The LFG is used to generate heat for internal or external consumption; (iii) The LFG is flared under monitored conditions. Validity period – 3 years from date of approval 28 November 2014.
AMS-III.AR.: Substituting fossil fuel based lighting with LED/CFL lighting systems	The project activity is deemed automatically additional in accordance with the "Guidelines on the demonstration of additionality of small-scale project activities" i.e. when the criteria specified in paragraph 2(c) or 2(d) are met. Validity period – NIL.
AMS-III.AY.: Introduction of LNG buses to existing and new bus routes	If it is demonstrated ex ante that the market share of project buses is less than or equal to 5% of the buses (not only public transport bus) in the region. Validity period – NIL.

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Document information

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